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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
HO, CHUONG T	

ART UNIT	PAPER NUMBER
2664	11

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/772,959	TEIXEIRA, JOE	
	Examiner	Art Unit	
	Chuong Ho	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *06/02/04* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *06/02/04* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The amendment filed 06/02/04 have been entered and made of record.

2. Applicant's amendment filed 06/02/04 with the respect to independent claims 1, 13, 25 have been considered but they are moot in view of the new ground (s) of rejection .

3. Claims 1-36 are pending.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 13, 25 rejected under 35 U.S.C. 103(a) as being unpatentable over Zitting et al. (U.S.Patent No. 6,584,148 B1) in view of Dunn et al. (U.S.Patent No. 6,072,793).

In the claim 1, Zitting et al. discloses the system and method of the present invention also provide protection switching by cross-connecting communication lines from their existing connection with a DSL access multiplexer (DSLAM) in the central office to an alternative connection with the DSLAM. For instance, if a DSL modem card in the DSLAM fails, the present invention is capable of switching the existing connections with the failed modem card to an alternative modem card. The cross-connect capability also provides a method of changing the type of DSL service provided to a customer (see col. 2, lines 23-30); comprising:

See figure 1, figure 4, providing digital subscriber line server for a first subscriber (customer primises 30) via an any-to-any cross-connect switch (relay matrix 172) connected to a digital subscriber line access multiplexer (DSLAM) connected to digital telecommunication network, the cross connect switch (relay matrix 172) supply a connection between data processing equipment of the first subscriber (customer primises 30) and the digital subscriber line access multiplexer (DSLAM) (see col. 9, lines 1-9, lines 44-50);

In response to receiving the indication at the network management system (loop management device 26), transmitting a command (the start test signal) to the cross connect switch (relay matrix 172) to switch out the connection of the data processing equipment of first subscriber (customer primises 30) to the digital multiplexer (see col. 9, lines 1-9, lines 44-50); and

In response to receiving the command (the start test signal) at the cross-connect switch (relay matrix 172) , switching out the connection of the data processing equipment of first subscriber (customer primises 30) to the digital access multiplexer (see col. 9, lines 1-9, lines 44-50).

However, Zitting is silent to disclosing receiving, at a network management system connected to the cross connect switch, an indication that the first subscriber has terminated service.

Dunn et al. discloses in response to a request from an operation support system to the controller 10 (network management system), the auxiliary ECMDF establishes a connection between a specified subscriber and specified input to the SLCRT 31; comprising:

receiving at a network management system (controller 10) connected to the cross connect switch (AUX ECMDF 35, AUX FRAME 21, ,LEC Switch 3, CAP Switch 5), an indication that the first subscriber has terminated service (see figure 1, col. 3, lines 46-55, lines 9-16);

in response to receiving the indication at the network management system (controller 10), transmitting a command to the cross connect switch (AUX ECMDF 35, AUX FRAME 21, ,LEC Switch 3, CAP Switch 5) to switch out (to add or remove connections) the connection of the data processing equipment of first subscriber (see figure 1, col. 3, lines 46-55, lines 9-16);

in response to receiving the command at the cross-connect switch, switching out the connection of the data processing equipment of first subscriber (see figure 1, col. 3, lines 46-55, lines 9-16).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Zitting with the teaching of Dunn to switch out the connection of the data processing equipment of the first subscriber in order to response to an indication that the first subscriber has terminated service. Therefore, the combined system would have been enable the obsolete subscriber line to be disconnected remotely.

6. In the claim 13, Zitting et al. discloses the system and method of the present invention also provide protection switching by cross-connecting communication lines from their existing connection with a DSL access multiplexer (DSLAM) in the central office to an alternative connection with the DSLAM. For instance, if a DSL modem card in the DSLAM fails, the present invention is

capable of switching the existing connections with the failed modem card to an alternative modem card. The cross-connect capability also provides a method of changing the type of DSL service provided to a customer (see col. 2, lines 23-30); comprising:

See figure 1, figure 4, providing digital subscriber line server for a first subscriber (customer primises 30) via an any-to-any cross-connect switch (relay matrix 172) connected to a digital subscriber line access multiplexer (DSLAM) connected to digital telecommunication network, the cross connect switch (relay matrix 172) supply a connection between data processing equipment of the first subscriber (customer primises 30) and the digital subscriber line access multiplexer (DSLAM) (see col. 9, lines 1-9, lines 44-50);

In response to receiving the indication at the network management system (loop management device 26), transmitting a command (the start test signal) to the cross connect switch (relay matrix 172) to switch out the connection of the data processing equipment of first subscriber (customer primises 30) to the digital multiplexer (see col. 9, lines 1-9, lines 44-50); and

In response to receiving the command (the start test signal) at the cross-connect switch (relay matrix 172) , switching out the connection of the data processing equipment of first subscriber (customer primises 30) to the digital access multiplexer (see col. 9, lines 1-9, lines 44-50).

However, Zitting is silent to disclosing receiving, at a network management system connected to the cross connect switch, an indication that the first subscriber has terminated service.

Dunn et al. discloses in response to a request from an operation support system to the controller 10 (network management system), the auxiliary ECMDF establishes a connection between a specified subscriber and specified input to the SLCRT 31; comprising:

receiving at a network management system (controller 10) connected to the cross connect switch (AUX ECMDF 35, AUX FRAME 21, ,LEC Switch 3, CAP Switch 5), an indication that the first subscriber has terminated service (see figure 1, col. 3, lines 46-55, lines 9-16);

in response to receiving the indication at the network management system (controller 10), transmitting a command to the cross connect switch (AUX ECMDF 35, AUX FRAME 21, ,LEC Switch 3, CAP Switch 5) to switch out (to add or remove connections) the connection of the data processing equipment of first subscriber (see figure 1, col. 3, lines 46-55, lines 9-16);

in response to receiving the command at the cross-connect switch, switching out the connection of the data processing equipment of first subscriber (see figure 1, col. 3, lines 46-55, lines 9-16).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Zitting with the teaching of Dunn to switch out the connection of the data processing equipment of the first subscriber in order to response to an indication that the first subscriber has terminated service. Therefore, the combined system would have been enable the obsolete subscriber line to be disconnected remotely.

7. In the claim 25, Zitting et al. discloses the system and method of the present invention also provide protection switching by cross-connecting communication lines from their existing connection with a DSL access multiplexer (DSLAM) in the central office to an alternative connection with the DSLAM. For instance, if a DSL modem card in the DSLAM fails, the present invention is capable of switching the existing connections with the failed modem card to an alternative modem card. The cross-connect capability also provides a method of changing the type of DSL service provided to a customer (see col. 2, lines 23-30); comprising:

See figure 1, figure 4, providing digital subscriber line server for a first subscriber (customer primises 30) via an any-to-any cross-connect switch (relay matrix 172) connected to a digital subscriber line access multiplexer (DSLAM) connected to digital telecommunication network, the cross connect switch (relay matrix 172) supply a connection between data processing equipment of the first subscriber (customer primises 30) and the digital subscriber line access multiplexer (DSLAM) (see col. 9, lines 1-9, lines 44-50);

In response to receiving the indication at the network management system (loop management device 26), transmitting a command (the start test signal) to the cross connect switch (relay matrix 172) to switch out the connection of the data processing equipment of first subscriber (customer primises 30) to the digital multiplexer (see col. 9, lines 1-9, lines 44-50); and

In response to receiving the command (the start test signal) at the cross-connect switch (relay matrix 172) , switching out the connection of the data processing

equipment of first subscriber (customer primises 30) to the digital access multiplexer (see col. 9, lines 1-9, lines 44-50).

However, Zitting is silent to disclosing receiving, at a network management system connected to the cross connect switch, an indication that the first subscriber has terminated service.

Dunn et al. discloses in response to a request from an operation support system to the controller 10 (network management system), the auxiliary ECMDF establishes a connection between a specified subscriber and specified input to the SLCRT 31; comprising:

receiving at a network management system (controller 10) connected to the cross connect switch (AUX ECMDF 35, AUX FRAME 21, ,LEC Switch 3, CAP Switch 5), an indication that the first subscriber has terminated service (see figure 1, col. 3, lines 46-55, lines 9-16);

in response to receiving the indication at the network management system (controller 10), transmitting a command to the cross connect switch (AUX ECMDF 35, AUX FRAME 21, ,LEC Switch 3, CAP Switch 5) to switch out (to add or remove connections) the connection of the data processing equipment of first subscriber (see figure 1, col. 3, lines 46-55, lines 9-16);

in response to receiving the command at the cross-connect switch, switching out the connection of the data processing equipment of first subscriber (see figure 1, col. 3, lines 46-55, lines 9-16).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Zitting with the teaching of Dunn to switch

out the connection of the data processing equipment of the first subscriber in order to response to an indication that the first subscriber has terminated service. Therefore, the combined system would have been enable the obsolete subscriber line to be disconnected remotely.

8. Claims 2-12, 14-24, 26-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Zitting-Dunn) in view of the admitted prior art.

In the claims 2, 14, 26, the combined system (Zitting-Dunn) discloses the limitations of claim 1 above.

However, the combined system is silent to disclosing the collocation arrangement demarcation connected to the cross-connect switch and a patch line connecting the central office MDF to the collocation arrangement demarcation.

The admitted prior art discloses the collocation arrangement demarcation (collo 111) connected to the cross connected switch 110 and a patch line connecting the central office MDF 106 to the collocation arrangement demarcation 111.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Zitting-Dunn) with the teaching of the admitted prior art to provide the collocation arrangement demarcation in order to connect the central office MDF to the cross connect switch.

9. In the claims 3, 15, 27, the admitted prior art discloses the connection between the data processing equipment of the first subscriber and the central office MDF (106) is unshared (see figure 1, the admitted prior art).

10. In the claims 4, 16, 28, the admitted prior art discloses the cross-connect switch is connected to a port of the digital subscriber line access multiplexer (DSLAM) (see figure 1).

11. In the claims 5, 17, 29, Dunn et al. discloses the step of switching out the connection of the data processing equipment of first subscriber to the digital access multiplexer frees up the port of the digital subscriber line access multiplexer (see figure 1, col. 3, lines 50-56, lines 9-15).

12. In the claims 6, 18, 30, Dunn et al. discloses receiving, at a network management system connected to the cross connect switch, an indication that a second subscriber has initiated service; in response to receiving the indication at the network management system, transmitting a command to the cross connect switch to connect data processing equipment of second subscriber to the digital access multiplexer; and in response to receiving the command at the cross-connected switch, connecting the data processing equipment of the second subscriber to the digital access multiplexer (see figure 1, col. 3, lines 50-56).

13. In the claims 7, 19, 31, Dunn et al. discloses the cross-connect switch is connected to a port of the digital subscriber line access multiplexer and the step of switching out the connection of the data processing equipment of the first subscriber to the digital access multiplexer frees up the port of the digital subscriber line access multiplexer (see figure 1, col. 3, lines 50-56).

14. In the claims 8, 20, 32, Dunn et al. discloses connecting the data processing equipment of the second subscriber to the port of the digital subscriber line access multiplexer that was freed up by the step of switching out the connection of the data processing equipment of first subscriber to the digital access multiplexer (see figure 1, col. 3, lines 50-56).

15. In the claims 9, 21, 33, Dunn et al. discloses the connection between data processing equipment of the first subscriber and the digital subscriber line access multiplexer comprises a central office MDF connected to the data processing equipment of the second subscriber, a collocation arrangement demarcation connected to the cross-connect switch and a path line connecting the central office MDF to the collocation arrangement demarcation (see figure 1, col. 3, lines 50-56).

16. In the claims 10, 22, 34, the admitted prior art discloses the connection between the data processing equipment of the first subscriber and the central office MDF (106) is unshared (see figure 1).

17. In the claims 11, 23, 35, the admitted prior art discloses the connection between data processing equipment of the second subscriber and the digital subscriber line access multiplexer comprises a central office MDF connected to the data processing equipment of the second subscriber, a collocation arrangement demarcation connected to the cross-connect switch and a path line connecting the central office MDF to the collocation arrangement demarcation (see figure 1).

18. In the claims 12, 24, 36, the admitted prior art discloses the connection between the data processing equipment of the second subscriber and the central office MDF is unshared (see figure 1).

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong Ho whose telephone number is (703) 306-4529. The examiner can normally be reached on 8:00AM to 4:00PM.

21. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Chuong Ho
Examiner
Art Unit 2664

08/16/04

WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER
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